AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for manufacturing multimaterial parts, wherein the multimaterial contains a tough material component (B), selected from ferrous-based materials having Fe > 50 wt.% and nickel-based materials having Ni > 50 wt.%, in a desired distribution with a wear-resistant hard material component (A), comprising:

providing, a wear-resistant hard material component (A), comprising carbideforming additives in a total proportion of 3-20 wt.%, based upon the weight of the wear-resistant hard material:

forming and densifying a green body from a tough material component (B), selected from ferrous-based materials having Fe > 50 wt.% and nickel-based materials having Ni > 50 wt.%, and the wear-resistant hard material component (A) by a process comprising hot isostatic pressing to form a substantially densified green body;

hot working the substantially densified green body to a hot working degree of at least 2, wherein the working degree is determined from the cross-sectional areas of the body prior to and after hot working, thereby obtaining a desired distribution between the tough material component (B) and the hard material component (A), thereby forming a hot worked multimaterial part, wherein said hot working comprises one or more of hot rolling, radial forging, or open forging.

- 2. (Previously presented) The method of claim 1, wherein the wear-resistant hard material component (A) and the tough material component (B) may be in a powderized, partially densified, or entirely solid state prior to said densifying of the green body.
- 3. (Previously presented) The method of claim 1, wherein the wear-resistant hard material component (A) is a ferrous-based material having Fe > 50 wt. % or, alternatively, is a mixture of a ferrous-based material and a ceramic material containing not more than 30 wt. % of a metallic binder, and wherein the hardness of the wear-resistant hard material component (A) is greater than HRC 35.
- 4. (Previously presented) The method of claim 1, wherein the hardness of the tough material component (B) is not greater than HRC 35.
- 5. (Previously presented) The method of claim 1, wherein prior to said densifying, the wear-resistant hard material component (A) is in a powderized state, and comprises (1) a ferrous metallic powder having a composition wherein Fe > 50 wt. % and containing 0.5-3.5 wt. % carbon, 0.5-15 wt. % chromium, 0-5 wt. % molybdenum, less than 2 wt. % manganese and less than 2 wt. % silicon, all based upon the weight of the ferrous metallic powder, and (2) not more than 50 wt. % of ceramic particulates, based upon the weight of the powderized wear-resistant hard material component (A), and an optional metallic binder in an amount_not greater than 30 wt. %, based upon the weight of the powderized wear-resistant hard material

Attorney's Docket No. 1032221-000059 Application No. 10/531,871

Page 4

component (A), wherein the rest of the composition comprising impurities or trace amounts of different additives.

- 6. (Canceled)
- 7. (Canceled)
- 8. (Previously presented) The method of claim 2, wherein the wear-resistant hard material component (A) is a ferrous-based material having Fe > 50 wt. % or, alternatively, is a mixture of a ferrous-based material and a ceramic material containing not more than 30 wt. % of a metallic binder, and wherein the hardness of the wear-resistant hard material component (A) is greater than HRC 35.
- 9. (Previously presented) The method of claim 3, wherein the hardness of the wear-resistant hard material component (A) is greater than HRC 50.
- 10. (Previously presented) The method of claim 8, wherein the hardness of the wear-resistant hard material component (A) is greater than HRC 50.
- 11. (Previously presented) The method of claim 2, wherein the hardness of the tough material component (B) is not greater than HRC 35.
- 12. (Previously presented) The method of claim 11, wherein the hardness of the tough material component (B) is not greater than HRC 25.

- 13. (Previously presented) The method of claim 3, wherein the hardness of the tough material component (B) is not greater than HRC 35.
- 14. (Previously presented) The method of claim 13, wherein the hardness of the tough material component (B) is not greater than HRC 25.
- 15. (Previously presented) The method of claim 2, wherein prior to said densifying, the wear-resistant hard material component (A) is in a powderized state, and comprises (1) a ferrous metallic powder having a composition wherein Fe > 50 wt. % and containing 0.5-3.5 wt. % carbon, 0.5-15 wt. % chromium, 0-5 wt. % molybdenum, less than 2 wt. % manganese and less than 2 wt. % silicon, all based upon the weight of the ferrous metallic powder and (2) not more than 50 wt. % of ceramic particulates, based upon the weight of the powderized wear-resistant hard material component (A), and an optional metallic binder in an amount not greater than 30 wt. %, based upon the weight of the powderized wear-resistant hard material component (A), wherein the rest of the composition comprising impurities or trace amounts of different additives.
- 16. (Previously presented) The method of claim 3, wherein prior to said densifying, the wear-resistant hard material component (A) is in a powderized state, and comprises (1) a ferrous metallic powder having a composition wherein Fe > 50 wt. % and containing 0.5-3.5 wt. % carbon, 0.5-15 wt. % chromium, 0-5 wt. % molybdenum, less than 2 wt. % manganese and less than 2 wt. % silicon, all based

Page 6

upon the weight of the ferrous metallic powder and (2) not more than 50 wt. % of ceramic particulates, based upon the weight of the powderized wear-resistant hard material component (A), and an optional metallic binder in an amount not greater than 30 wt. %, based upon the weight of the powderized wear-resistant hard material component (A), wherein the rest of the composition comprising impurities or trace

17. (Previously presented) The method of claim 4, wherein prior to said densifying, the wear-resistant hard material component (A) is in a powderized state, and comprises (1) a ferrous metallic powder having a composition wherein Fe > 50 wt. % and containing 0.5-3.5 wt. % carbon, 0.5-15 wt. % chromium, 0-5 wt. % molybdenum, less than 2 wt. % manganese and less than 2 wt. % silicon, all based upon the weight of the ferrous metallic powder and (2) not more than 50 wt. % of ceramic particulates, based upon the weight of the powderized wear-resistant hard material component (A), and an optional metallic binder in an amount not greater than 30 wt. %, based upon the weight of the powderized wear-resistant hard material component (A), wherein the rest of the composition comprising impurities or trace amounts of different additives.

18. (Canceled)

amounts of different additives.

- 19. (Canceled)
- 20. (Canceled)

- 21. (Canceled)
- 22. (Previously presented) The method of claim 3, wherein the ceramic material comprises a carbide, oxide, nitride, boride, or mixture thereof.
- 23. (Canceled)
- 24. (Previously presented) The method of claim 1, wherein said forming and densifying comprises charging said tough material component (B) and said wear-resistant hard material component (A) into a mold to form a green body, and densifying the green body by hot isostatic pressing to form the substantially densified green body.
- 25. (Previously presented) The method of claim 1, wherein said forming and densifying comprises forming a network structure of tough material component (B) in a mold using hot isostatic pressing, and then filling voids with wear-resistant hard material component (A).
- 26. (Previously presented) The method of claim 1, further comprising post-processing the hot worked multimaterial part by one or more of machining or heat treating, to form a post-processed material.

- 27. (Previously presented) The method of claim 26, further comprising joining the post-processed material to a manufactured part by one or more of brazing, gluing, welding, or mechanical joining techniques.
- 28. (Previously presented) The method of claim 1, wherein tough material component (B) is predensified.
- 29. (Previously presented) The method of claim 4, wherein the hardness of the tough material component (B) is not greater than HRC 25.
- 30. (Previously presented) The method of claim 1, wherein tough material component (B) is present in a volume proportion of 20-40 vol. %.